DOCUMENT RESUME

ED 394 437 HE 029 131

AUTHOR Epper, Rhonda Martin
TITLE Coordination and Competition in Postsecondary Distance Education: A Comparative Case Study of Statewide Policies.
PUB DATE 11 Apr 96
NOTE 48p.; Paper presented at the Annual Meeting of the American Educational Research Association (New York, NY, April 8-12, 1996).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Case Studies; Comparative Analysis; Competition; Cooperative Programs; *Distance Education; *Educational Policy; Higher Education; Program Development; *Public Policy; *Statewide Planning; Technological Advancement
IDENTIFIERS Colorado; Maine; Minnesota

ABSTRACT

A study examined the experiences of three states (Minnesota, Maine, Colorado) concerning the development of distance education at the postsecondary level, and the implications of each state's public policy approach. The study's principal objective was to better understand the forces for coordination and competition in state systems of higher education by examining state policies and structures for distance education, and secondarily, to combine higher education and business conceptual models to explain changes brought about by technology. Data were gathered from planning and policy documents on distance education in the state higher education executive officers' libraries and from interviews with 10-15 key informants in each state. Data analysis reduced the information to case study form. The three case studies are presented here, as are findings and policy implications concerning distance education and competition, structures, and statewide coordination. The paper concludes that coordination and competition can and must co-exist, that careful consideration of the economic and organizational decisions needed is crucial to success, and that states and institutions are responding to new market demands. (Contains 44 references.) (MSE)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 394 437

COORDINATION AND COMPETITION IN POSTSECONDARY DISTANCE EDUCATION: A COMPARATIVE CASE STUDY OF STATEWIDE POLICIES

by

Rhonda Martin Epper
Research Associate
State Higher Education Executive Officers

Presented at the Annual Meeting
of
The American Educational Research Association
April 11, 1996
New York City

Rhonda Martin Epper
State Higher Education Executive Officers
707 17th Street, Suite 2700
Denver, Colorado 80202-3427
(303) 299-3627
(303) 296-8332 FAX
e-mail: repper@ecs.org

HE 029 131

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Rhonda Martin Epper

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Contents

Introduction 1

Background for the Study 1

Objectives of the Research 5

Method 5

The Minnesota Case Study 8

The Maine Case Study 14

The Colorado Case Study 23

Findings and Policy Implications 30

Conclusion 38

Introduction

> Colleges and universities better be very sure of the value we add in our residential environments. While we still believe that "character" education requires person-to-person contact and long-term mentoring, we had better substitute technology where possible so we can concentrate on what makes us unique. My colleagues and I feel a little like Rolls Royce employees when they first heard of Henry Ford. (Jim Mannoia, Houghton College, 1995)

This quote illustrates the struggle of traditional institutions of higher education in the face of rapid technological change. Faculty and administrators, preserving their market niche or carving out new ones, search for the proper balance between face-to-face and technology-enhanced instruction. While institutions wrestle with the appropriate place and use of technology, state governments press them to accommodate more students at a lower cost.

As the principal providers of higher education services in the United States, state governments are concerned with providing greater access to postsecondary opportunities. Accommodating more students during fiscal retrenchment requires policymakers and educators to look for creative solutions. One solution, which has captured the attention of state policymakers, is making greater use of new technologies, including postsecondary distance education.

Background for the Study

Postsecondary education is no longer tied only to traditional campus classrooms, nor does it necessarily originate in the same state or even the same nation as the user. These new forms of instructional delivery are facilitated through the practice of *distance education*, defined for this study as any formal approach to learning in which a majority of the instruction occurs via *electronic* communications. This study's analysis reveals that without

state-level policy coordination, distance education efforts can be costly, duplicative, or marginalized within a state. Underpinning and informing the study were three major themes from three separate bodies of literature: statewide coordination of public higher education, competition, and public policy for distance education.

Statewide Coordination

"For the greater part of the century, the relations between public institutions of higher education and state government have been marked by increasing anxiety" (Moos & Rourke, 1959, p. 1). The anxiety of the past two decades has been caused in part by the changing role of state government from provider of financial support to partner with institutions in the resolution of key policy issues (Hines, 1988).

Statewide coordination began as early as 1784 when New York created the State Board of Regents, but did not fully develop until after World War II during the growth period of higher education (Millett, 1984). Statewide coordination was offered as "an omnibus solution to the ills of wasteful competition and unregulated growth in public higher education" (Moos & Rourke, 1959, p. 203). State officials turned to coordinating and centralized boards as a solution to proliferation of new degree programs and unnecessary duplication of courses and programs. Robert O. Berdahl (1971) divided the evolution of state higher education agencies into four periods:

> 1. Complete autonomy of institutions lasting from colonial days to the late 19th century;
>
> 2. Creation of single statewide governing boards beginning in the late 19th century, reaching a peak in the first two decades of this century. . .;
>
> 3. Creation of voluntary arrangements gaining impetus in the 1940s and 1950s; and
>
> 4. Creation of statewide coordinating boards beginning in the 1950s. . . (Pliner, cited in Berdahl, 1971, p. 26)

In the 1990s, statewide coordinating and governing boards are deeply involved in the resolution of key higher education policy issues. One perennial policy issue is how to provide state citizens greater access to postsecondary opportunities. To the extent that distance education offers a potential solution to this issue, it spans both educational and political jurisdictions.

Competition

In his 1986 book, Higher Learning, Derek Bok described competition as one of three distinguishing characteristics of American higher education. Colleges and universities compete with one another for faculty members, for students, for funds, and most importantly, for prestige. However, there is no single goal toward which the competitive rivalry is addressed, as is the case in for-profit industries, i.e., market share and profits (Porter, 1980). Educational innovations, such as new instructional technologies, often are perceived as adding prestige and competitive advantage in attracting students. Furthermore, faculty members and administrators pay attention to programs and initiatives established at sister institutions, and often copy those tried elsewhere (Bok, 1986). However, the desire to innovate and adopt new innovations is often not strong enough to overcome the inertia of tradition. In for-profit industries, competition is often the mechanism that drives individuals and organizations to surmount such inertia and to strive continuously to improve. But competition, notes Bok, "succeeds only to the extent that customers, judges, or other trusted sources can define success in some legitimate way in order to establish a standard and reward those who best achieve it" (p. 177). In higher education, that ability is ambiguous at best. Students and other interested parties have difficulty comparing the quality of their education with that of other colleges and universities. What students *can* easily compare is cost and convenience; therefore, programs designed to meet the needs of nontraditional students possess a

competitive advantage in that particular student market. Throughout this study, the theme of competition, as it relates to distance education and other new instructional technologies, was demonstrated as a powerful force that changed both institutional and public policy in the states under investigation.

Public Policy and Postsecondary Distance Education

Scarce research exists that examines the influence of public policy on distance education programs in the United States. Such influence is a major theme in the present study. Important previous work in this area includes Nancy Zeller's (1995) "Distance Education and Public Policy." In this article, she compared the United States' lack of a comprehensive public policy agenda for distance education to Canada and other countries. Her study showed that government interest in the United States is focused on technical, regulatory, administrative, and cost issues rather than more pressing public policy issues, such as, improving access to postsecondary education. For a successful statewide program, institutional administrators must consider access and other important policy issues when developing distance education programs. Likewise, state leaders must reexamine outdated policies that may interfere with institutional plans to extend educational services to distant students.

The relationships between state coordination, distance education, and the competitive pressures brought to higher education through new technologies are of escalating political and educational importance. In its 1995 Campus Trends, the American Council on Education identified more than one third of higher education institutions making extensive class use of electronic technology. Nearly half of all institutions responding to the annual survey indicated that they would offer more courses through distance education over the next five years (El-Khawas, 1995). With so many institutions now interested in distance education, it

is vital that state-level plans and policies for distance education be compared and explored. There are simply too many scarce tax dollars at stake for this issue to be left unexamined.

Objectives of the Research

This research examined three states' experiences with distance education development and the implications for the public policy approach taken. The principal objective of the study was to better understand forces for coordination and competition in state systems of higher education by examining state policies and structures for distance education. A secondary objective was to extend the research on statewide coordination of higher education by combining higher education and business conceptual models to explain the changes brought about by technology. Guiding research questions developed from the literature include the following three major concerns:

1. In the states under investigation, how has distance education influenced the competitive environment in higher education, particularly in the market for nontraditional, adult education?

2. What distance education structures, if any, are most suitable in helping a state meet its goals for improving access to postsecondary education?

3. Technology and distance education have introduced new forces in higher education, resulting in a conflict between traditional principles of statewide coordination (limit duplication, divide up turf, equalize resources) and those of competition. How are these conflicts being resolved in the three case study states?

Using the conceptual lenses of coordination, competition, and distance education public policy, each of the three questions was explored in Minnesota, Maine, and Colorado.

Method

This study employed a comparative case study research design using qualitative data. The nature of the research questions in this study required an in-depth exploration into state-

level policies and politics surrounding distance education. The complexity of the variables, therefore, made the qualitative paradigm a logical choice for the type of data to be used within the case study design.

The case study design was chosen because it offered "a means of investigating complex social units consisting of multiple variables of potential importance in understanding the phenomenon" (Merriam, 1988, p. 32). Within the same study, more than one case may be included (Yin, 1989). These are called "multiple case studies" or "comparative case studies." The present research consisted of three case studies, with the primary unit of analysis being the state-level approach to the use of postsecondary distance education.

Data Collection

The multiple case study design encompasses the state-level planning efforts for postsecondary distance education from three states: Minnesota, Maine, and Colorado. These three states were chosen through purposive sampling, based on the assumption that "one wants to discover, understand, gain insight; therefore one needs to select a sample from which one can learn the most" (Merriam, 1988, p. 48). Additionally, an expert panel from the field of higher education public policy provided advice and review during the selection process. Final selection of the state cases was based on the expert panel's advice and a review of statewide distance education and telecommunications plans for higher education. This investigation included an examination of enabling legislation, state reports, telephone interviews, and a review of the literature.

As Yin (1989) suggests, multiple sources of evidence were used to gather data. Document analysis, interviews, and observations all were used as evidence in this study.

Document analysis and observations. For each state, the researcher examined documents located in the State Higher Education Executive Officers (SHEEO) library relating

to postsecondary distance education. These documents included statewide plans, legislation that addressed distance education, and system or coordinating board policies relating to distance education. These documents were supplemented by additional documentation collected during site visits to the three states. Documents collected at the sites included such items as planning documents, policies, legislation, memoranda, meeting minutes, and agenda items. In addition to the documents and interviews, direct observations were conducted of legislative hearings in Minnesota and Colorado. Fieldnotes were also utilized to record the researcher's notes, observations, reflections, and ideas throughout the research process.

Conducting the interviews. Between February and September 1995, unstructured, in-depth interviews were held with key informants in each state. Because many of the informants in all three states were high-level officials within their states, the researcher used a specialized form of in-depth interviewing described by Marshall and Rossman (1989) as "elite interviewing" (p. 94). Elite respondents are considered to be "the influential, the prominent, and the well-informed people in an organization or community" (p. 94). In each state, the researcher conducted 10 to 15 interviews lasting from 45 minutes to 2 hours each. The interviews were audiotaped to facilitate data transcription and analysis.

Data Analysis Strategies

Through the process of data analysis in the present study, conceptual categories were developed from interview, observational, and documentary data sources. Conceptual frameworks derived from prior literature were used in building the categories, although new variables and relationships were seen. In the process of analysis, data were organized, reduced and consolidated to form the case record or case study data base (Yin, 1989). Marshall and Rossman (1989) describe this process as one of "reduction" and "interpretation." To facilitate such reduction and interpretation, categories and themes were developed to

interpret the meaning of the data. Interview transcripts were coded following guidelines suggested by Merriam (1988).

The data analysis process was aided by the use of a qualitative data analysis computer program called QSR.NUDIST. NUDIST stands for Non-numerical Unstructured Data Indexing Searching and Theorizing. The software creates an environment to store and explore data and ideas, to minimize clerical routine and maximize flexibility, and to discover new ideas and build upon them. For the present study, NUDIST was used primarily to code and index interview segments online, which were later retrieved, sorted, and regrouped into more meaningful categories. The final step in the analysis process was to build abstractions across the multiple cases in the study. The NUDIST software greatly enhanced the researcher's ability to compare and contrast interview responses through searching the index system by state or by thematic issue.

In the next three sections, summaries of the three case studies are presented.

The Minnesota Case Study

In the early 1990s, Minnesota faced growing demand for higher education in the Twin Cities area as well as the challenge of providing access to programs in sparsely populated rural areas of the state. In 1993, at the request of the Minnesota Higher Education Coordinating Board (MHECB), the legislature allocated nearly $5 million to establish a statewide higher education telecommunications network. The legislature also established a Telecommunications Council with authority to plan and develop the statewide network, now known as the Learning Network of Minnesota.

In 1995, MHECB made some drastic legislative recommendations for change in the way higher education is delivered. Essentially, it proposed the adoption of a structure for alternative delivery of higher education modelled on the British Open University and the

British Columbia Open Learning Agency. The structure would have initially worked as a consortium of existing colleges and universities, but eventually taken on a life of its own, developing and distributing course materials. The justification for such an entity was based on MHECB's growing belief that courseware materials can increase learning at a lower cost. At the same time, MHECB proposed that the legislature establish a "credit bank" to evaluate and award credit for the new open learning agency (MHECB, 1995).

Joseph P. Graba, then executive director of MHECB, crafted the 1995 legislative recommendations, which argued that the legislature's investment to date in the Learning Network of Minnesota was simply in the "technological highway, not what travels across it" (MHECB, 1995, p. 15). Graba described a growing movement that provides courses to students outside traditional classrooms--citing Mind Extension University, the National Technological University, and a commissioned study by Helmut Schweiger (1995) of distance learning worldwide. The use of multimedia course materials was noted as a growing trend. The MHECB recommendations stated:

> The use of distance education courseware materials will proliferate. Unless Minnesota becomes a developer, even an exporter, of such materials, it will become an importer, relying on the expertise and knowledge of organizations and institutions beyond its borders. . . Minnesota is faced with a choice: whether simply to take advantage of the materials prepared by others and become an importer of such material or to draw upon its own talented faculty and successful institutions to develop and disseminate courseware that contributes to learning inside and outside Minnesota. (MHECB, 1995, p. 17)

That scenario apparently compelled several legislators to take action. Based on the MHECB recommendations, identical bills were introduced in both the senate (March 13, 1995) and house (March 9, 1995) to create an alternative delivery structure and credit bank, and mandate the coordinating board to begin planning for an open learning institution in the state. These bills were sponsored by key legislators who carried a good deal of influence in key committees (Lewenstein, personal communication (pc), 1995). The bill, if enacted, would

create a consortium of the University of Minnesota, the newly merged Minnesota State Colleges and Universities (MnSCU), and the Minnesota Private College Council to (1) identify statewide learning needs, (2) acquire, develop, and distribute learning resources, and (3) facilitate the delivery of learning opportunities to residents of Minnesota (Minnesota House of Representatives, 1995, pp. 1-2).

In essence, the bill would have created a new educational entity. Stated in the MHECB recommendations was, "this initiative initially challenges the existing institutions and systems to meet the needs within existing structures," but ultimately it sought independent status as advocated in the Schweiger study. The recommendation continued, "this proposal envisions the initial effort to implement alternative delivery evolving into the creation of an open learning institution that could grant degrees" (MHECB, 1995, p. 17).

Response from Higher Education Community

In interviews with various constituencies of higher education, respondents were asked to respond to the proposed legislation. Reactions were mixed. David Laird, president of the Minnesota Private College Council, was less than enthusiastic, stating, "the frustrating part of the discussion is that the coordinating board is myopic by thinking Minnesota institutions should be necessary partners. Their thinking doesn't allow for other strategic relationships outside the state that may be much more natural or more important" (Laird, pc, 1995). Don Riley of the University of Minnesota was even more direct with his objections:

> What wasn't clear to me in Joe's proposal was some sense of competitive advantage. In our partnerships with industry and other institutions, we will only enter into areas that we feel are strategic, where we have competitive advantage and intend to remain a leader in the field. Where we don't think we can compete, we will outsource to someone else. It's not clear to me that the consortium will work this way. They have an overinflated view of their ability to deliver and compete in the marketplace. (Riley, pc, 1995)

Others, however, indicated an appreciation for the need and potential for such a delivery

structure. Terrence MacTaggart, chancellor of the State University System said, "I think the idea is a good one." But he advised caution:

> The territorial concerns are going to be paramount. MHECB is fighting for its identity right now, and other people are probably going to look at it as an attempt to provide a rationale for MHECB. The other problem is there is a history of conflict between MHECB and institutions, and unfortunately--very unfortunately--a good idea like this one is going to have an uphill fight. (MacTaggart, pc, 1995)

The president of the faculty union for the State University System, Edgar Twedt, was not even aware of the proposal. Even so, his reaction was negative. "I think the faculty response will be negative because of bad feelings toward the coordinating board, even without evaluating the merit of the idea. Faculty will think MHECB hasn't served a useful purpose in the state, so they must be trying some other way to control" (Twedt, pc, 1995).

In April 1995, during the final days of legislative deliberations, the newly appointed academic vice chancellor for the newly merged Minnesota State College and University system (MnSCU), Dennis Hefner, publicly came out in opposition to the bill. In a letter to the state representative who authored the legislation he stated:

> I have continuing discomfort with the bill, even after the changes suggested at our meeting. In particular, the arguments for a statewide marketing program do not add much value to the distance learning functions already occurring within the state. Secondly, I feel very strongly that the long run viability of the approach requires significant involvement of on-campus faculty. Moving away from direct campus responsibility for distance learning could undercut the growing inventory of distance learning programs offered by MnSCU campuses and may lose much of the public support which has been generated for distance learning. (Hefner, 1995, p. 1)

In addition to this system opposition, some legislators questioned the wisdom of creating yet another council for higher education telecommunications, when they had just funded one in 1993. According to MHECB staff member Phil Lewenstein, some saw the new structure not as creating healthy competition, but as "another mouth at the table" at a time when they were having trouble funding the existing 64 public higher education institutions (Lewenstein, pc,

1995).

The bill was never passed by the 1995 legislature, but because neither the house nor the senate took action to defeat the bill, it remained an active piece of legislation that conceivably could be enacted in the second half of the legislative biennium in 1996.

Competitive Forces

Changing student demographics, structural changes in revenue sources for states, technological advances, and a changing economy that depends more heavily on the skills and knowledge of its workers are all forces that invite the entry of new competitors into higher education. Traditional higher education, according to two higher education leaders, has not adjusted quickly enough or well enough to these changes. Joe Graba of MHECB expressed his dissatisfaction with higher education's progress:

> A knowledge-based economy focuses attention on how well we are doing and how responsive we are in deferring to the needs of our learners. This may sound overly harsh, but I think that higher education is a mainframe operation in a world that has moved from mainframes to minis to laptops. And we're still back in the mainframe mentality in higher education. (pc, 1995)

Terrence MacTaggart, then chancellor of the Minnesota State University System, also supported this view:

> I think a pretty good case can be made that much of the falloff in credibility in higher education has been our own fault for failing to prove relevant performance to the various customers we serve--students, families, legislators, the state. . . I think we need either to reform and improve ourselves or be content with a much diminished role and reduced support in this enterprise. (pc, 1995)

One type of threat perceived by several persons interviewed was private sector companies moving in not only to meet new demand, but to take away market share from traditional higher education. In a conference designed to build support for the 1995 alternative delivery legislation, Joe Graba painted a sobering picture for legislators and others present:

> The fastest growing demand and greatest learning needs are with the currently employed. Our higher education institutions need to escalate attention to this unmet need. It has been in the last 10 to 15 years that this market has exploded. Higher education is allowing the massive development of private sector competitors. (Open and Distance Learning Conference, 1995)

In a similar legislative forum, Graba further emphasized this point:

> We need to think radical here. Higher education in the mid-nineties is where the railroads were in the mid-forties. Economics is going to change learning. We will see a proliferation of for-profits emerging to meet unmet needs. . . We shouldn't be overly threatening, but this is serious! We're creating our own competitors. We need to bring up our own provider base. (Policymakers Forum, 1995)

For other individuals interviewed, the threat of competition was perceived to be not nearly so close, nor so daunting. Terrence MacTaggart expressed skepticism over the possibility that traditional higher education would be driven out of business: "the market for higher education is not perfectly competitive; it's monopolistically competitive. I'm not certain people would make that many different choices if there were more providers" (pc, 1995).

Those holding a more conservative position, therefore, believed the demand for traditional higher education would not significantly change, despite technological advances. For those making the decision to offer the proposal, however, the threat of competition by new providers was a clear factor. Individuals in the latter category existed outside academia and included legislators, coordinating board members, and coordinating board staff.

Ironically, one of the reasons for the proposal's introduction, the threat of competition, may also have been a reason for its demise. When the alternative delivery structure emerged as a legislative proposal, institutional administrators and faculty made their positions known. Some perceived the alternative delivery structure not as a response to outside competition, but as a potential new competitor within the state system. Others, particularly the University of Minnesota, recognized the need to compete with new providers, but questioned the ability of this proposed structure to help Minnesota institutions compete in a global educational market.

Ultimately, a lack of support from campus administrators contributed in part to the alternative delivery proposal's failure. Faculty did not directly oppose the bill in a formal way because they simply were not organized around this issue. Institutional administrators, primarily from the University of Minnesota and the new system of state colleges and universities, strongly opposed the bill. Without the support of these key players, the proposal never gathered enough momentum to overcome the political and budgetary obstacles it faced. In addition, uncertainty over changes in the state's postsecondary governance structure, which were implemented in July 1995, contributed to the political climate in which the bill was rejected.

After statewide policy discussion and the bill's stalemate in the legislature, distance education and curricular development remained at the campus level. In other words, it remained with existing competitors within the system. The bill's lack of support is consistent with Schweiger's analysis of open and distance learning worldwide. He suggests that most successful distance learning operations exist outside traditional higher education systems. Those that attempt to enter traditional higher education systems are usually "choked off" by existing institutions (1995). Although this policy was not adopted, it represents an attempt at comprehensive state policy for distance education. In addition, Minnesota's previous policy approaches had developed the Minnesota Learning Network and a multi-sector telecommunications council to carry out statewide policies concerning distance education.

The Maine Case Study

In 1985, Maine was ranked 49th among states in the number of high school graduates going to college and 50th in the number of adults enrolling in any form of higher education. The University of Maine System (UMS), a governing board, decided at that time to address the problem of delivering higher education to isolated regions of the state. The Education

Network of Maine (EdNet) was officially inaugurated in September 1989. Today the Education Network delivers credit-bearing courses leading to associate's, bachelor's, and master's degrees to more than 100 Maine locations each semester (University of Maine at Augusta, 1989, 1992).

Maine's strategy for delivering distance education initially was to designate a lead institution, the University of Maine at Augusta (UMA), to direct and administer the Education Network (Wagner, 1994). However, a number of important subsequent decisions made by the University of Maine System Board of Trustees caused considerable controversy within the state.

First was the separation of EdNet from the University of Maine at Augusta in May 1994. The other six campus within the system were not using the network to its full potential, in part because of its affiliation with the Augusta campus. System officials and board members wanted to encourage other campuses to utilize the network. Therefore, the board of trustees separated EdNet from Augusta and designated it as an independent, free-standing entity within the University of Maine System. The decision to separate EdNet from Augusta represented one step toward greater centralization of postsecondary distance education.

In January 1995, the trustees took a giant leap, organizationally and politically, by authorizing the Education Network of Maine to grant degrees and seek independent regional accreditation. Following this decision, there were faculty protests by way of position papers, newspaper editorials, legislative testimony, and ultimately collective votes of "no confidence" in the chancellor from all seven campuses. On the other hand, distant students from all over the state voiced their support for accreditation and expansion of services provided by EdNet. In the end, the chancellor resigned and the board postponed its decision to seek accreditation. The political wounds suffered ran deep among all faculty, students, and administrators

embroiled in the controversy. The following discussion explains in greater detail the board's decision and subsequent reactions and consequences.

Rationale for the Decision

Since the Education Network of Maine began its operations in 1989, the UMS Board of Trustees had looked for ways to better serve adult learners. Students enrolling in ITV courses originating from multiple campuses had been facing a tangled web of inconsistent administrative procedures. For example, in a concept paper, UMA President George Connick described a fictional distant student named "Amy" and the obstacles she faced in registering for four Interactive Television (ITV) courses. Amy was required to make a total of 28 contacts by phone or mail to individuals in various academic departments, admissions offices, registrars offices, and financial aid offices on each of the four campuses (Connick, 1994). This report, "Educating Amy," prompted faculty and administrators involved with distance education to recognize that they needed to be more responsive to the needs of distant students. One way EdNet had responded to this need was to create a Teleservice Center so that its distant students could "take care of business" without having to come to campus. Students dial a toll-free number, which connects them with experienced student services personnel who respond to questions ranging from admissions to billing.

It was this same desire to better serve the off-campus student that drove the board's decision for the Education Network of Maine to seek separate accreditation. In a set of recommendations to the UMS Board of Trustees, George Connick and his staff at EdNet outlined the rationale for such a move. The recommendations were spelled out in the document, "Education Network of Maine: Implementation of Phase II." In this document, the Education Network of Maine was defined not as a traditional provider of education, but as a facilitator, offering existing providers several vehicles for degree delivery. When two or more

campuses collaborate to offer a degree program over EdNet, or if students want to build their own degrees from courses on various system campuses, several questions arise. First, which institution will grant the degree? Second, who will determine quality standards and ensure program effectiveness? In the "Phase II" document, Connick recommended as next steps that the Education Network of Maine be granted permission to seek accreditation so that it might solve some of these problems by offering consortial or joint degrees from the UMS campuses (ENM, 1995). On January 23, 1995 the Board of Trustees accepted the "Phase II" recommendations and granted permission for the Education Network of Maine to seek independent accreditation from the New England Association of Schools and Colleges (Price, 1995a).

Faculty Reactions

Faculty concerns centered around four issues: the rapid pace and process by which decisions about EdNet were being made, the organizational structure of EdNet, the quality of the Interactive Television (ITV) learning experience, and the technology employed by EdNet. Among the most impassioned protesters of the board's decision were faculty from the flagship campus in Orono, the University of Maine. Even before the decision to seek accreditation, faculty at Orono were uncomfortable with the speed of development of EdNet. On December 14, 1994, the Orono faculty senate passed a resolution insisting on more faculty oversight of the Education Network of Maine. The resolution stated that EdNet presented unique problems because it lacked a permanent, tenured faculty, and referred to the faculty role in EdNet as "the major issue currently facing higher education in Maine" (Hale, 1994). Faculty also asked the board to take no further action on EdNet until the faculty question was straightened out. However, the board of trustees pressed ahead with their plan the following month.

Both the Orono and Augusta faculty assemblies prepared a responses to the "Phase II" document and board decision. The Orono faculty's primary concerns dealt with the faculty role in ensuring quality programming on EdNet. Augusta faculty members were more concerned with process. Regarding organizational structure, the UMA faculty criticized "the inordinate amount of power and resources being put into the hands of EdNet without serious consideration of the complementary role of campuses" (Faculty Assembly, 1995, p. 2). "Why," they asked, "must the Phase II recommendations stress competition and haste?" (Faculty Assembly, 1995, p. 1). They also expressed concern that "Phase II" failed to acknowledge Maine students as EdNet's first priority as opposed to new national and global markets. Augusta faculty members, having been the primary users of the system, were more critical of the decision process and the organizational structure of EdNet than they were of the learning experience and choice of technology.

Other faculty members expressed their concerns through the press. In a full-page editorial published by the Bangor Daily News, Robert Klose, assistant professor of Biological Science at University College, wrote:

> What is so insidious about this project is that it has come upon us like a thief in the night. Or like a freight train. Unforgivably, there has been no invitation to the people of Maine to enter into the dialog of need, appropriateness, and cost-effectiveness of ITV and EdNet. . . what is saddest of all is that the reckless, rather than measured installation of this system shows the utmost contempt for the culture of the university. . . and that the real decisions about what will be taught, how it will be transmitted, and who will teach it, are being left to businesspeople who may very well may be involved in little more than empire-building. (Klose, 1994)

Other faculty critics presented testimony at regular board meetings and at legislative hearings held in response to the controversy. At the January 23, 1995 board meeting, a faculty member from the University of Southern Maine commented, "With EdNet and the Community College, you are buying a costly pig in a poke that falls short of expectations" (Hale, 1995, p. 1). In response to the systemwide faculty imbroglio, special legislative

hearings were held in the months following the board's January 1995 decision. Several faculty members presented testimony, "but it was the same faculty that went back to every legislative meeting" according to George Connick (pc, 1995). "Finally the legislature began to ask some questions about who these people were. They were beginning to say 'Wait a minute. Why do these people have so much time to come down here and talk?' So it began to reverberate against them" (Connick, pc, 1995). Members of the legislature began to view these faculty protestors as self-serving.

Faculty reactions to the board's decision for EdNet to seek accreditation cannot be taken out of context from other decisions concerning distance education, such as, the separation of EdNet from Augusta. The 1995 decision, however, when put in combination with those previous and the absence of a faculty contract since 1991, became a flashpoint for faculty criticism and public debate.

Student and Citizen Support

As the bickering went on, many students stood by watching their educational dreams tossed around like a political football. Some were not content to sit on the sidelines. From the islands, valleys, backwoods, and far reaches of the state came letters to the faculty senates, legislators, and newspapers. For example, Ida W. Page, a student at the Ellsworth Center, wrote to the Ellsworth American:

> I am a student of ITV at the Ellsworth Center of the University of Maine at Augusta, and am tired of people judging the best way for me to obtain my education. I, as a single parent, raised three children in Ellsworth and they have all attended college. Now it is my turn to get an education. . . The Orono faculty would have you believe I am not getting a quality education; I disagree. They would have you believe I am not capable of getting knowledge without the professor seeing the color of my eyes. (Page, 1995)

Mark F. Wamsley, a student at the East Sullivan/Winter Harbor site, delivered a presentation

to the Orono faculty senate, in which he stated:

> To start, I take offense to all the recent negative publicity which paints the image of distance learners as "unmotivated" students and the ITV courses as a passive way to learn. . . I have had the opportunity to attend both on-campus classes and the ITV programs. I am a full-time employee, full-time parent of three small children, half-time student, active in the community, and, along with my wife who is a full-time student, full-time mother, part-time employee, we home school our children. This is not your typical "unmotivated individual." By no means am I trying to imply that I am better than any other distant learner, but that I am probably closer to a typical distant learner than a "traditional student." (Wamsley, 1995)

The students' message was unified and clear: they wanted critics of EdNet to understand that for nontraditional students who are highly motivated to learn, EdNet offers educational opportunities they otherwise would not be afforded.

Ordinary citizens, concerned by the actions of and reactions by members of the university community, weighed in on the debate. Their voices, much like the students, were resoundingly in favor of EdNet. To the general public, faculty protesters appeared arrogant and self-serving. For example, one citizen from Presque Isle said, "the real reason the University of Maine faculty are dead set against the introduction of ITV is the union can foresee that less faculty are going to be needed for a higher quality education product" (Underwood, 1995, p. 3B). Citizens around the state who had seen the benefits of EdNet in their communities offered little sympathy for the faculty protesters.

Despite their best efforts, the distant voices of students and citizens were faint compared to the shrill protests of faculty. Though they reaffirmed their support for EdNet and distance learning, the Board of Trustees would finally back off its decision for EdNet to seek accreditation.

Administrative Consequences

In the months following the board's decision in January 1995, tension between faculty and system administrators mounted. Adding impetus to the accreditation concern were three issues: (1) A merger of the University College in Bangor with two-year programs in Augusta to form a new Community College of Maine; (2) a perceived centralization of the system inferred from the Chancellor's remarks to the legislature on a common course catalog and "exit examinations"; and (3) the long-simmering lack of a faculty employment contract (Price, 1995b). The situation came to a head at the board's regular meeting on March 27, 1995. Faculty and traditional students from throughout the system formally presented resolutions of "no confidence" in UMS Chancellor J. Michael Orenduff. The board voted to strongly support the chancellor. However, by the first week in April he had decided to leave his office (Price, 1995b). On April 5, 1995 the board appointed former chancellor Robert L. Woodbury as interim chancellor. Woodbury had held the post from 1986 to 1993.

At its regular meeting on May 22, 1995, the board voted to "affirm its commitment to distance education" and reaffirmed the role of the Education Network of Maine (UMS, 1995, p. 1). At this meeting, the board also resolved that the Education Network of Maine was *not* authorized to seek degree-granting authority or to pursue accreditation "at this time" (UMS, 1995, p. 2). In July 1995, several months following his departure, Orenduff reflected,

> I think what happened with the Board is they thought, and I thought that perhaps a change in the chancellor's office would deflate some of the rhetoric which was really kind of bizarre and nasty, and allow things to move forward. Interestingly enough, after I resigned and they asked Bob [Woodbury] to come back and fill the position, the kind of vocal critics came to Bob and said "now we want to un-do all of this." The only thing they undid was the accreditation. So the same faculty are still mad that the thing is separate. (pc, 1995)

Interim Chancellor Woodbury made clear that the EdNet issue is not going to go away. He indicated that the pace of EdNet's expansion might slow, but the ultimate direction will remain the same (Lazar, 1995).

Competitive Forces

Leaders within the university system, especially George Connick and J. Michael Orenduff, believed telecommunications would increasingly allow the outside world to compete with the University of Maine System. In other words, some educational entity would serve the residents of Maine who cannot or choose not to attend one of the seven traditional campuses. The choice for the University of Maine System, it was thought, was to provide those services or risk becoming a non-player in a rapidly changing educational market. When asked if the threat of competition had influenced his thinking on distance education, George Connick, president of EdNet, replied,

> Yes. It isn't an abstract threat, it is a real threat. We are seeing the technologies change in this state to the point where it is going to be possible for anybody to be a provider, and the only way that the University of Maine System is going to survive is if it adds value to the educational enterprise. Part of the problem is that people have forgotten they are not in the campus business; they are in the education business. And what we are seeing is this massive effort to protect campuses, to protect my office, to protect where I work, to protect where I teach. The students, because they are older, have quickly caught on to what the issues are here. What the faculty furor has done is really begin to clarify what is at stake here and the faculty can't win that battle. They are absolutely not going to win it. (pc, 1995)

J. Michael Orenduff, the embattled former chancellor, also felt strongly that students would have more choices in the future than what the University of Maine System could provide. In response to the same question posed to Connick, Orenduff replied,

> I think that is the underlying issue for those in Maine and nationwide. . . [Education] is going to be more consumer oriented. It is going to be available right in your home, and you are not going to have to pay higher fees. It probably will be cheaper, you won't have to look for parking places, and you won't have to put up with the bureaucracy of the university. We have approximately the same number of traditional students in higher education today as we did a half century ago--two or three million. The rest of the higher education students are not interested in all of the trappings that go with higher education. They just want the degree, they want the economic advantage, and they want the knowledge. I think we are in for a revolution, and like most revolutions it's going to have to initially overcome the entrenched interest. (pc, 1995)

Thus, according to Connick and Orenduff, significant changes are in store for higher education if it is to remain relevant and competitive in our society.

The policy steps taken by the University of Maine System on EdNet are of a new variety for statewide higher education governing boards. While political mistakes may have been made in carrying out those steps, they represent not the old functions of protecting geographic territories of service, but rather of breaking down geographic boundaries and bureaucratic obstacles faced by students. Competition, in the case of Maine, was an impetus both to expand and limit the scope of EdNet. George Connick and J. Michael Orenduff perceived EdNet as a competitive advantage in the national and global market for higher education. Existing competitors, acting as a cartel within the state system of higher education, perceived EdNet as a potential threat to their own competitive position in the statewide market for higher education.

The Colorado Case Study

Distance education has a long and complex history in Colorado. Beginning in the 1970s and in some cases earlier, postsecondary institutions around the state were offering courses to students at a distance. State level policymakers made several attempts in the early 1980s and early 1990s to coordinate the disparate activities that had sprung up around the state. However, even legislative mandates proved unable to bring about institutional coordination of distance education. Instead, institutions continued operating independent distance education programs, and several grassroots organizations developed to improve cooperation.

The year 1995 was a watershed for distance education development in Colorado. In that year, three events stand out as the most critical for postsecondary distance education. First, the legislature established technology as one of five priority funding areas for higher

education and appropriated $2 million for that purpose. The Colorado Commission on Higher Education (CCHE), the statewide coordinating board, allocated the funds to institutions through a competitive grant process. Second, CCHE changed its long-standing policy on geographic service-area boundaries so that cash funded distance learning programs were free to compete throughout the state. This policy change represents the changing roles of statewide coordinating boards, influenced in part by changes in technology. CCHE commissioners and staff members recognized that certain policies were either outdated, over-burdensome, or irrelevant, and took steps that would facilitate greater use of distance education in the state. Third, the legislature created a 12th community college, the Colorado Electronic Community College. It also appropriated nearly $12 million in capital development funds to higher education technology projects, $9 million of which went to the community college system primarily for a production and electronic curriculum development center.

Colorado Electronic Community College

On March 20, 1995, legislators passed House Bill 95-1196 and authorized the creation of the Colorado Electronic Community College (CECC). The specific language in the legislation named the "Colorado Community College and Occupational Education System College" as a 12th community college in the state system (State of Colorado, 1995, p. 4). Perhaps because it was less controversial, the name Colorado Electronic Community College was not used in the legislation itself, but used only after the community college *system* had been given statutory authority to operate its own separate college. As Jerry Wartgow, president of CCCOES and CECC's architect, observed:

> We managed to get legislation passed last session with very little controversy. I'm getting calls from people all over the country asking if they can get tapes of the testimony and asking what our legislative strategy was. People from Maine are asking us, "how did you manage to do this, and why weren't the

> institutions opposed to it?" I don't know if everyone was asleep at the switch or what, but we weren't. I went directly to the majority leader of the house and said, "here's what I want to do long-term." We just went for it. (pc, 1995)

After legislative approval of the concept, Wartgow quickly began using the new name and began implementing his vision. A representative from Colorado State University, who wished not to be identified, thought the process by which CECC was created was "sneaky." He stated, "there just wasn't a lot of discussion around the state. It was kind of the Stealth bill" (pc, 1995).

The CECC concept was developed in collaboration with Jones Intercable, which operates Mind Extension University and other educational ventures. In cooperation with Jones and other partners, CECC initially will serve as an "umbrella" organization that will offer a full range of transferable general education curricula through a number of technologies, including cable television, to students in Colorado and the nation. Mary Beth Susman, CECC's executive director, said Jones found the partnership attractive because of some unique features of the Colorado community college system, such as, a core transfer agreement with all four-year schools, common course descriptions, common course numbering, common course titles in the core, and common course syllabi.

In the fall of 1995, CECC began using the services of Mind Extension University to deliver curriculum to distance learners across the country who wished to complete an entire Associate of Arts or Associate of Science degree through this program.

In its first semester on the air, CECC operated as follows. Jones made available CECC programming to its millions of cable customers throughout the United States and also provided admissions, billing, records, bookstore, and student advising support to CECC students. Faculty members from the 11 community colleges in Colorado were responsible for creating, managing, and delivering the instructional services to CECC students (CECC, 1995). CECC's legislative authority does not give it accreditation, which would allow it to grant

degrees. Therefore, Arapahoe Community College initially is serving as the transcriptor and degree-grantor for CECC (Susman, pc, 1995). Mary Beth Susman explained:

> What I am doing is sort of brokering the A.A. degree for the CECC student. They will have all the resources of the 11 community colleges for this degree. But we didn't want to develop a whole student services side to the college, that is just too expensive. But our students still need financial aid advising, placement advising, etc. So we asked the colleges who might be interested, and willing to be a loss leader just to be a part of the project. We selected Arapahoe because they are seen as the transfer college in the state--not that you can't transfer from others--but that is an image that Arapahoe had projected and held on to in the eyes of the citizenry. We felt that it would be a good college to start with. (pc, 1995)

According to Jerry Wartgow, CECC eventually will seek its own accreditation. He stated that CECC will use Arapahoe "as an umbrella for credibility under which to build this." But at some point, "that credibility will have to move over to the Colorado Electronic Community College" (pc, 1995). As long as the institutions were cooperating, however, Wartgow did not see an immediate need to seek accreditation. In his words:

> The great thing about the legislation for Colorado Electronic Community College is that we haven't had to use it for anything. It just sits there. But if a college or faculty starts balking, we'll just say, "okay, maybe we should just run it through Colorado Electronic Community College," then there will be much more receptivity to change. In other words, we don't have to go out begging. All we would have to do is get accredited, and by going in with Jones, we could get accreditation status. (pc, 1995)

In September 1995, CECC offered five courses: psychology, English composition, ethics, sociology, and statistics (Mind Extension University, 1995, p. 106) A total of 60 students were registered from Colorado, California, New Jersey, Maryland, Oregon, Texas, Florida, and Hawaii (Susman, pc, 1995). CECC chose outstanding faculty members from the eleven campuses, each of whom had won teaching awards and had experience teaching at a distance, to teach the first five courses. In the spring of 1996, CECC plans offered eight courses to over 100 students.

When the legislature decided to create CECC, it also wanted to make sure faculty and other public and private users would be trained in the use of educational technology. Toward that end, legislators appropriated $8.7 million in capital development funds in 1995 to the community college system. The majority of those funds would be used to build a state-of-the-art curriculum production facility. The new facility will be located at the Lowry Higher Education and Advanced Technology Training Center, which is the site of a closed Air Force base undergoing conversion to civilian uses. The new facility will provide opportunities for faculty to produce their own curriculum products, such as, CD-ROM masters, video programs, and Internet curriculum (CECC, 1995). Jones Intercable will be a major leaseholder of the facility, producing income that will allow CECC to keep equipment current and operate training programs at the facility. The new curriculum development and training facility is scheduled to begin operation Fall of 1996.

Competitive Forces

Postsecondary distance education in Colorado lacked statewide coherence because of institutional resistance to centralization, existing competitive rivalries among institutions, and little policy direction from system governing boards or CCHE.

Resistance to centralized authority. Previous attempts by policymakers to bring together institutions of higher education on distance education delivery had ended in frustration. Attempts by CCHE in 1981 and 1989 to organize a statewide structure for distance education were "sabotaged" by the institutions before they ever got off the ground (Grieder, pc, 1995). Part of the reason lies in the governance structure of the state, and past relationships between institutions and CCHE. A representative of the University of Colorado, who wished not to be identified, said institutions had purposely left CCHE out of the knowledge-loop on technology issues for fear that CCHE's involvement would result in

regulation. Institutions, operating under separate governing boards, had developed sound distance education programs without state-level involvement, and hesitated to give up ownership. However, in 1995 and 1996, institutions were beginning to build grassroots efforts to cooperate among themselves through institutional alliances known as Telecoop, the Colorado Learning Network, and the Higher Education Telecommunications Alliance (HETA).

Existing competitive rivalry. A result of institutional resistance to a statewide effort has been multiple delivery systems across the state. In addition to a compressed video network known as CIVICS, which spans the state, numerous educational and governmental bodies have developed network capacities that, in many cases, are duplicative. For example, in 1995, Colorado Mountain College was developing a compressed digital video network to connect all of its campuses at 13 sites. This network is separate from the community college system initiatives, though at some point the technologies should be able to interconnect. Norm Murray of the State Division of Telecommunications noted:

> The state of Colorado at this time does not have any single authority in telecommunications. That is why you are seeing the CIVICS network and the Northeast Alliance of the CLN, and the Colorado Mountain College network, and the state rural health network, and a host of others. These networks keep popping up, but there doesn't seem to be a central authority or direction. (pc, 1995)

In 1996, the University of Colorado at Boulder had proposed creating yet another network, which would serve as the statewide fiber backbone using a sophisticated ATM (Asynchronous Transfer Mode) technology. There is a sense of ownership among those involved in distance education. Everyone wants to be the leader, and the result is everyone ends up stepping on each other's toes. Steve Tilson from Front Range Community College described this sense of ownership:

> It is an interesting position for somebody like me to be in because I got into this five years ago. And for three and a half years I was the prophet in the wilderness. I, and people like me, were writing memos that never got read, holding meetings that nobody came to, pounding on desks, and ranting and

> raving and having people chuckle at us. Now all of a sudden, we're in the limelight. And it's not always a comfortable feeling. There is a great sense of possession--"This is mine. Nobody else wanted it, but it was mine." Now all of a sudden everybody wants it. (pc, 1995)

Thus, a fierce rivalry among postsecondary institutions and individuals involved with distance education has contributed to the lack of coordination in the state.

The new market entrant. The community college system, led by Jerry Wartgow, created the Colorado Electronic Community College in response to a perceived market need, and a belief that if they did not meet that need, someone else would. At first, there were some concerns among the existing 11 community colleges that the new college would be in competition with their existing distance learning programs. Mary Beth Susman explained:

> There were some very rational concerns. Some of the colleges wondered if we were creating a 12th college that would be in competition with their programs. But first of all, we are not FTE funded, so our tuition will be higher. I'm charging $120 per credit hour, and a community college credit is something like $52 per credit hour. So we didn't threaten them in that way. Second, a large part of our market is going to be outside Colorado. (pc, 1995)

Steve Tilson, president of Telecoop, initially had some concerns, but believed that the system needed to gain whatever competitive advantage it could against present and future outside competitors. He remarked:

> If we don't do it they will - they are. The only thing we have that gives us an edge is reputation from legitimacy and rigor and soundness of quality - and that is eroding quickly. We had better get our ducks in a row, better stop competing with each other and doing all the stuff that we have traditionally done. We are going to lose a lot of people and a lot of good parts of the old paradigm, but it is going to happen. It is not going to be easy or quick or cheap, but it better start happening because the alternative is higher education in this country falling into the hands of big business. I'm enough of a traditional academic that I think that is a very bad idea. (pc, 1995)

There was recognition by some that higher education was becoming more competitive beyond the state borders, and that Colorado institutions needed to prepare for that competition. Jerry Wartgow also shared this conviction. He noted that four-year institutions in Colorado were

"dropping the ball" by letting institutions like the University of Phoenix take away their market share (pc, 1995). When asked whether the threat of competition had influenced his views on distance education, Wartgow replied:

> I don't know if competition is the driving force, but I use it all the time to try and bring faculty and reluctant administrators around. It's not so much the threat of competition as it is meeting a market need. If we don't come around to meet that need, however, someone else will. Places like the University of Colorado at Boulder never have to worry. There is always going to be a certain percentage of the high school graduates in this state, traditional college age kids who want to go to Boulder and live in the dorm and have parties, and they will do very well and get a good education. I would be really worried if I were some of the other ones--that aren't CU Boulder--about competition in the future and about survivability. (pc, 1995)

The threat of outside competition clearly was an important factor in the community college system's decision to create the Colorado Electronic Community College.

Policymakers and educators in Colorado have developed and supported postsecondary distance education as a policy tool to extend access and to reach new markets. While there was much distance education activity in Colorado in 1995, the community colleges were the only postsecondary institutions to bring about a statewide comprehensive program.

Findings and Policy Implications

At the time of this study, each state had introduced a significant policy initiative relating to distance education. Minnesota's proposed alternative delivery structure, Maine's network separation and accreditation, and Colorado's electronic community college each stimulated debate within the policy and education communities. At the conclusion of the study, the Minnesota initiative had stagnated in the legislature, aspects of the Maine plan had been curtailed, and Colorado's initiative was just getting started. By no means do these obstructed policies imply failure, but rather untested state-level action to respond to new demands. The new policy initiatives represent only part of the state distance education

stories. Each new initiative was built upon active institution- and state-based distance education programs, which had successfully served various student populations for many years. The three state approaches had several policy ramifications, which are discussed next.

Distance Education and Competition

The first research question of this study asked how distance education influenced the competitive environment in higher education in each of the three states. The availability of distance education technologies changed the competitive environment in Minnesota, Maine, and Colorado most distinctly by expanding the traditional markets of colleges and universities. It could be argued that the markets were there to begin with, but distance education has enabled higher education institutions to better serve new student populations, particularly working adults and those geographically isolated from a campus.

Classic business models can help explain this competitive environment. Kotler (1988) discusses the "marketing concept," which holds that "the key to achieving organizational goals consists in determining the needs and wants of target markets and delivering the desired satisfactions more effectively and efficiently than competitors" (p. 17). Kotler distinguishes the marketing concept from the "product concept," which holds that "consumers will favor those products that offer the most quality, performance, and features. Managers in these product-oriented organizations focus their energy on making good products and improving them over time" (p. 14). Table 1 contrasts the traditional higher education "product concept" against the higher education "marketing concept," which represents the direction in which some institutions and states are moving because of increased competition.

Table 1
The Higher Education Product and Marketing Concepts

Starting Point	Focus	Means	Ends
(a) Traditional Higher Education Product Concept			
Institution, faculty---------->	Teaching, Research---------->	Recruiting, promoting------>	Enrollments through reputation, prestige
(b) The Higher Education Marketing Concept			
Student market---------->	Customer needs ---------->	Coordinated marketing------->	Enrollments through customer satisfaction

Note. Adapted from Kotler, 1988, p. 17.

This study found that each of the three states were at some stage of moving from an "institution" and "product" focus toward the marketing concept of a student and customer focus. Maine had advanced the most toward this concept through its student outreach activities, such as, the teleservice center, the Educating Amy studies, and market needs assessments conducted by the Education Network of Maine. The Colorado Electronic Community College developed in response to a perceived market need, as did the proposal for an alternative delivery structure in Minnesota. The four-year institutions in those two states, however, were less interested in a statewide effort to coordinate delivery of distance education.

At the same time, there were forces working against the marketing concept. Three forces, in particular, weighed heavily against the new market forces: a focus on the "product" of higher education, existing competitive rivalries, and systemwide and state level politics. In Maine, for example, faculty concerns over the quality of the "product" and internally focused questions of governance temporarily derailed plans to expand the Education Network of

Maine. In Colorado, competitive rivalries among institutions and their numerous distance education programs precluded the development of a statewide focus on the needs of learners and consumers of postsecondary education. Minnesota experienced similar "turf" concerns among institutions. These turf concerns in Minnesota combined with the threat of a new "internal" competitor and system level politics ultimately staved off the proposed new alternative delivery structure.

Distance Education Structures

The second research question concerns which distance education structures are most suitable for helping a state meet its goals for access to postsecondary education. The answer can be explained by first examining a conceptual model for distance education delivery structures. In Zeller's (1995) distance education policy framework, four policy approaches to statewide distance education delivery are presented (See Table 2).

Table 2
Properties and Policy Dimensions Related to the
Four Models of Distance Education

Properties	Policy-Oriented Dimensions Laissez-Faire Consortia Coord. Council Comprehensive <---------->
Purpose	Single.....Broad
Planning/ Coordination	Local.....State Level
Ownership/Control of the Technical Capacity	Dispersed.....Concentrated
Access/Clientele Served	Narrow.....Broad
Programming	Limited.....Comprehensive
Role of Institutions	Individual.....Collaborative
Cost Efficiency	Duplicated Costs.....Cost Efficient

Note. From Zeller, 1995, p. 126

Zeller categorizes statewide approaches along a policy-oriented continuum ranging from "laissez-faire," where no state-level plan for distance education exists, to "comprehensive," where the state views distance education as an instrument of public policy to increase postsecondary participation. After data analysis, the three states in this study can be placed at several points along the continuum (See Table 3).

Table 3
Distance Education Policy Continuum

Laissez-Faire	**Consortium**	**Coord. Council**	**Comprehensive**
<----------	----------	----------	---------->
Colorado 4-yrs -no state level comprehensive plan. -clientele is employed professionals, mostly graduate level. -institutions initiate distance education independent from one another.	**Minnesota** -routine state level planning through Tele-communications Council. -various student populations served. -limited number of degrees offered. -institutions cooperate to a limited extent, mostly on technical rather than program issues.	**Colo CC's** -systemwide planning at community college board. -wide range of associate degrees offered. -system designed for undergraduates seeking two-year degrees. -institutions cooperate in delivery of programming.	**Maine** -planning, coordination, and delivery assigned to one entity. -institutions may also participate in the system. -system designed to provide access to anyone who needs it. -range of associate's, bachelor's and master's degrees offered.

Note. Adapted from Zeller, 1995, pp. 128-130

In Colorado, the policy approach to distance education for four-year institutions was very close to "laissez-faire." However, recent actions by the four-year institutions, such as, their participation in the Higher Education Telecommunications Alliance (HETA), suggest a modest move toward the "consortium" approach. Colorado community colleges, however, operate closer to the "comprehensive" end of the continuum. System level policies, such as, common course numbering and course descriptions, and articulation agreements allow the

community college system to serve students statewide through distance education. Their ability to act as a unified system was one reason Jones Intercable entered into a joint venture with them to create the Colorado Electronic Community College.

Minnesota was judged to be at the "coordinating council" point on the continuum. The Minnesota legislature created the Telecommunications Council in 1993 for the expressed purpose of developing a statewide vision and plan for distance education, developing and implementing policy, distributing state funds to areas of state priority, and coordinating with all public sectors, including K-12 education. Through this council, Minnesota was able to connect the numerous distance education networks around the state into a regionally-based Minnesota Learning Network. Had the proposal for a separate alternative delivery structure passed, Minnesota would have moved closer to the "comprehensive" approach on the continuum.

Maine fits very near to the "comprehensive" policy approach. The Education Network of Maine operates as a separate entity within the University of Maine System. It has no affiliation with any one of the seven universities in the system. Zeller (1995) and Schweiger (1995) argue that this "single entity" model enables the broadest range of student populations to be served in the most cost-effective manner. The driving issue for policymakers in creating the Education Network of Maine was to increase the level of participation in postsecondary education, especially in geographically isolated regions of the state. They have met that goal. At the end of 1995, the Education Network of Maine was serving students from the associate degree level through the masters degree level in over 120 locations.

The three states' policy approaches, however, leave unanswered a critical question regarding access to postsecondary opportunities: who benefits and who pays? There appears to be a relationship between the policy approach to distance education and the student population group served. To simplify the argument, the state operating closer to the "laissez-

faire" end of the continuum serves primarily those students of more affluent means. In Colorado, most distance education offered by four-year institutions serves professionals seeking continuing education. For example, the University of Colorado at Boulder's CATECS program offers graduate engineering courses primarily to students who are reimbursed by their employers. Similarly, Colorado State University's SURGE program serves graduate students in engineering and business. The University of Northern Colorado delivers continuing education for teachers.

On the other hand, the two programs operating closer to the "comprehensive" end of the continuum serve less affluent student populations. The Education Network of Maine and the Colorado Electronic Community College serve students attempting to complete their first and second years of college. Since the A.A. degree is generally not financed by employers, the state subsidizes these programs with the expressed intention of raising the education levels and quality of life of its citizens. Thus, the underlying rationale for public investment in and coordination of distance education is that individual institutional and private sector solutions can lead to "cherry picking" the most attractive and profitable courses and programs, without regard to meeting public goals. This finding cannot be generalized beyond the three states in the study, but is consistent with Zeller's (1995) characterization of the four policy approaches.

Distance Education and Statewide Coordination

The third research question centers on the conflict between traditional principles of statewide coordination and the new values introduced by technology and distance education. A review of literature on statewide coordination shows a set of dominating principles since the late 1950s. Some of these principles included the following: prevention of unnecessary program duplication, maintenance of mission distinction, definition of geographic service areas, equitable distribution of resources, and systemwide planning (Glenny, 1959; Glenny,

1971; Berdahl, 1971; Millett, 1984).

Each of the three statewide distance education programs in some way challenged the traditional principles governing statewide coordination. In substitute for the old regulatory principles were newer "market-based" principles. Minnesota's proposal for an alternative delivery structure introduced new concepts like "partnering" for curriculum development and "marketing" curricular products beyond the state's borders. These ideas extend beyond the coordinating board's notable focus on curtailing institutional desires to expand their missions and programs. Additionally, the proposal for a Minnesota Credit Bank challenged institutions' historic control over degree requirements determined by "seat time." In Maine, the Education Network of Maine had conducted statewide needs assessments to determine programming that would be offered over the network. This market orientation stands in stark contrast with the traditional internal approach to program development, which begins with approvals at the departmental level and finally reaches the coordinating or governing board for review and approval. In addition, Maine had begun "importing" degree programs from outside the state to meet demands for programs that the in-state institutions would not or could not provide on the network. This concept runs counter to the old ideas of "protecting the turf" of local institutions. Similarly, Colorado relaxed its traditional service area boundaries for non-state-subsidized distance education programs so that all institutions could begin to compete statewide without artificial geographic constraints. Finally, Colorado set up a new funding system through which institutions compete for funds in areas the legislature designates as high priority. Although the base funds are still allocated through a formula, the new approach steps away from the "equal distribution" concept and allows those institutions that are best meeting state needs to be rewarded.

Table 4 illustrates some of these old principles of coordination gleaned from the literature contrasted with newer principles emerging from this study.

Table 4
Principles of Statewide Coordination
of Higher Education

Old (Regulation)	New (Competition)
Role & Mission based on program differentiation, geographic territory	**Role & Mission** based on institutional capacity, partnerships, market needs assessment
Quality assumptions based on inputs: selective admission, financial resources, faculty credentials, low student/faculty ratio, seat-time	**Quality** assumptions based on outputs: learning outcomes are measured through competency-based curricula; employer satisfaction
Delivery Structure campus-based	**Delivery Structure** home-based, community-based, includes broadband networks for video and multimedia courses
Funding based on: 1) equal treatment for mission and level 2) subsidizing institutions- bricks and mortar	**Funding** based on: 1) responsiveness to state and market needs 2) subsidizing students (vouchers) 3) strategic and focused
Student Population 18-24 year-olds	**Student Population** lifelong learners
Institutional Goals prestige and stability (Bowen, 1977)	**Institutional Goals** serve the market, competitive advantage
Scope of Coordination limited to traditional higher education institutions	**Scope of Coordination** cross-sector coordination, including business, K-12, libraries, and other governmental agencies

Conclusion

In the new competitive environment of higher education, the need for state coordination has changed, but not disappeared. In fact, one might argue that a public or quasi-public body that is concerned primarily with the "public purposes" of higher education is an even greater necessity in this age of entrepreneurship (Mingle & Epper, 1996). State boards, as in the past, will need to be advocates for the less powerful and affluent student populations.

This study illustrates that coordination and competition can and must coexist. Porter (1980) describes several ways in which competitors coordinate with one another to raise entry barriers in an industry (i.e., protect themselves from new competitors) and to achieve better bargaining position with suppliers. Similarly, state higher education institutions must coordinate in order to compete. It is difficult for institutions acting alone to make the front-end investments required to provide a high-quality distance education product to a large number of students. In Colorado, for example, a lack of coordination among four-year institutions has produced a disaggregated collection of courses and specialized programs, mostly for employed students. The Colorado community college system, on the other hand, is well positioned to move as a system to meet emerging market opportunities. This result may have broad implications for governance in the future, pushing institutions toward consolidated systems or formal partnerships.

The broader implications of this research relate to the will of state policymakers to immediately invest public funds in postsecondary distance education. They are asking questions about the wisest investment strategies, the most effective organizational structures, how to resolve conflicting policies, and other policy decisions. In short, there is a sense among policymakers of being "left behind" if they do not act quickly. As this study has shown, each of these policy decisions has profound implications and should not be made without careful consideration.

This research also points to a healthy prognosis for the future of public higher education. States and institutions are responding to the new market demands, even if it is only at the periphery of many institutions. If institutions continue operating closer to the "marketing concept," then new competitors will face a formidable challenge from the well established, though transformed system of public higher education.

REFERENCES

Primary Sources

Colorado Commission on Higher Education. (1981, September). Task force on the implications of educational technology: final report. Denver, CO: Author.

Colorado Commission on Higher Education. (1989, December). The statewide telecommunications system: a plan for the organization of a statewide educational telecommunications system. Denver, CO: Author.

Colorado Electronic Community College. (1995). Colorado Electronic Community College: programmatic information. Denver, CO: Author.

Connick, G. P. (1994). Educating Amy. Augusta, ME: Education Network of Maine.

Education Network of Maine. (1995). Implementation of Phase II: Recommendations to the UMS Board of Trustees. Augusta, ME: Author.

Faculty Assembly, University of Maine at Augusta. (1995). A commentary on Phase II of the Education Network of Maine: the faculty perspective. Augusta, ME: Author. ENM.

Hefner, D. L. (1995, April 6). A letter to The Honorable Steve Kelly, Minnesota House of Representatives. MHECB.

Mind Extension University. (1995). Annual course catalog: 1995 fall course schedule. Englewood, CO: Author.

Minnesota House of Representatives. (1995). A bill for an act: House File No. 1170, 79th session. St. Paul, MN: Author.

Minnesota Higher Education Coordinating Board. (1995). Report to the governor and 1995 legislature, Minnesota higher education: recommendations for change. St. Paul, MN: Author.

Open and Distance Learning Conference. (1995, February 24). A conference to inform policymakers and educators about alternative delivery approaches. St. Paul, MN: Sponsored by the Minnesota Higher Education Coordinating Board.

Policymakers Forum. (1995, February 15). A forum on the future of distance education in Minnesota. St. Paul, MN: Sponsored by the Higher Education Coordinating Board.

State of Colorado House of Representatives. (1995). An Act: House Bill 95-1196. Denver, CO: Author.

University of Maine at Augusta. (1989). Report to the Board of Trustees on the opening of the Community College of Maine. Augusta, ME: Author.

University of Maine at Augusta. (1992). The Education Network of Maine progress report, 1989-1992. Augusta, ME: Author.

University of Maine System. (1995, May 22). Board of Trustees agenda item summary. Education Network of Maine.

Wamsley, M. F. (1995, April 25). A letter to the University of Maine faculty senate. ENM.

Secondary Sources

Berdahl, R. O. (1971). Statewide coordination of higher education. Washington, DC: American Council on Education.

Bok, D. (1986). Higher learning. Cambridge, MA: Harvard University Press.

Bowen, H. R. (1977). Investment in learning: the individual and social value of American higher education. San Francisco: Jossey-Bass.

El-Khawas, E. (1995). Campus trends 1995: new directions for academic programs. Washington, DC: American Council on Education.

Glenny, L. A. (1959). Autonomy of public colleges: the challenge of coordination. New York: McGraw-Hill, 1959.

Glenny, L. A. (1971). Coordinating higher education for the 70's. Berkeley, CA: Center for Research and Development in Higher Education, University of California.

Hale, K. K. (1994, December 15). UMaine faculty wants ITV oversight. Kennebec Journal.

Hale, K. K. (1995, January 24). UM System board OKs new college: expansion of ITV comes under fire from faculty. Kennebec Journal, p. 1.

Hines, E. R. (1988). Higher education and state governments: renewed partnership, cooperation, or competition? (ASHE-ERIC Higher Education Report No. 5). Washington, DC: Association for the Study of Higher Education.

Klose, R. (1994, December 15). OpEd: EdNet can't replace the real thing. Bangor Daily News.

Kotler, P. (1988). Marketing management: analysis, planning, implementation, and control (6th ed.). Englewood Cliffs, NJ: Prentice-Hall.

Lazar, K. (1995, April 6). Woodbury to return as interim chancellor. Portland Press Herald, p. 14A.

Mannoia, J. (1995, November). Distance education and competition. In AAHESGIT. [aahesgit@list.cren.net]

Marshall, C. & Rossman, G. B. (1989). Designing qualitative research. Newbury Park, CA: Sage Publications.

Merriam, S. B. (1988). Case study research in education: a qualitative approach. San Francisco: Jossey-Bass.

Millett, J. D. (1984). Conflict in higher education: state government coordination versus institutional independence. San Francisco: Jossey-Bass.

Mingle, J. R. & Epper, R. M. (1996, forthcoming). State coordination and planning in an age of entrepreneurship. In M. W. Peterson, D. Dill, & L. Mets (Eds.), Planning strategies for the new millennium. San Francisco: Jossey-Bass.

Moos, M. & Rourke, F. E. (1959). The campus and the state. Baltimore: The Johns Hopkins Press.

Page, I. (1995, April 27). Another side of the story. Ellsworth American.

Porter, M. E. (1980). Competitive strategy: techniques for analyzing industries and competitors. New York: The Free Press.

Price, K. A. (1995a, February 28). University of Maine System Chancellor's Newsletter. Bangor, ME: University of Maine System.

Price, K. A. (1995b, July 12). University of Maine System Chancellor's Newsletter. Bangor, ME: University of Maine System.

Schweiger, H. (1995). Open and distance learning. St. Paul, MN: Minnesota Higher Education Coordinating Board.

Underwood, J. F. (1995, April 26). No jobs for life. Bangor Daily News.

Wagner, E.D. (1994). The Education Network of Maine: The University of Maine at Augusta. In R. A. Markwood & S. M. Johnstone (Eds.), New pathways to a degree: Technology opens the college. Boulder, CO: Western Cooperative for Educational Telecommunications.

Yin, R. K. (1989). Case study research: design and methods. Newbury Park, CA: Sage Publications.

Zeller, N. (1995, Winter). Distance education and public policy. The Review of Higher Education, 18(2), 123-148.

Minnesota Personal Communications

Brorson, Bruce. *Director of Continuing Education, University of Minnesota, Crookston.* Personal Interview, February 20, 1995.

Graba, Joseph P. *Interim Executive Director, Minnesota Higher Education Coordinating Board.* Personal Interviews, February 22, 1995 and June 20, 1995.

Heydinger, Richard. *Consultant, The Public Strategies Group.* Personal Interview, February 24, 1995.

Kelley, Ann. *Senior Administrator, Minnesota Higher Education Coordinating Board.* Personal Interview, February 17, 1995.

Kovel-Jarboe, Patricia. *Lecturer, University of Minnesota; Independent Consultant.* Personal Interview, February 23, 1995.

Laird, David. *President, Minnesota Private College Council.* Personal Interview, February 16, 1995.

Lewenstein, Phil. *Director of Communications and Legislation, Minnesota Higher Education Coordinating Board.* Personal Interview, February 16, 1995. Telephone Interviews, March, April, May, and October 1995.

MacTaggart, Terrence. *Chancellor, Minnesota State University System.* Personal Interview, February 23, 1995.

Mercer, Leslie. *Director of Policy and Program Planning, Minnesota Higher Education Coordinating Board.* Personal Interview, February 17, 1995.

Riley, Donald. *Vice Provost for Academic Affairs, University of Minnesota.* Personal Interview, February 23, 1995.

Sargeant, Donald. *Chancellor, University of Minnesota, Crookston.* Personal Interview, February 20, 1995.

Starke, Frank. *President, Dunwoody Institute.* Personal Interview, February 16, 1995.

Twedt, Edgar. *President, Interfaculty Organization.* Personal Interview, February 22, 1995.

Maine Personal Communications

Abbott, Tom. *Dean of Learning Resources and University Development, University of Maine at Augusta.* Personal Interview, May 31, 1995.

Connick, George P. *President, Education Network of Maine.* Personal Interview, May 30, 1995.

Fink, Joan R. *Director, Thomaston Center, University of Maine System.* Personal Interview, June 5, 1995.

Hurst, Frederick M. *Dean, Information Technologies & Telecommunications, Education Network of Maine.* Personal Interview, May 31, 1995.

Lowe, Susan. *Assistant Dean of Learning Resources for Off-Campus Library Services, University of Maine at Augusta.* Personal Interview, May 30, 1995.

MacBrayne, Pamela. *Executive Vice President, Education Network of Maine.* Personal Interview, May 30, 1995.

Marchio, Doug. *Director of Information Resources, University of Maine, Orono.* Telephone Interview, June 7, 1995.

Martin, John. *State Representative, Maine House of Representatives.* Personal Interview, June 1, 1995.

Nicoll, Donald E. *Educational Consultant,* Personal Interview, June 1, 1995.

Orenduff, J. Michael. *Former Chancellor, University of Maine System & President, New Mexico State University.* Personal Interview, July 10, 1995.

Pruitt, Laurie. *Executive Director of Finance & Budget, Education Network of Maine.* Personal Interview, May 31, 1995.

Schlenker, Jon. *Professor of Sociology & Anthropology & Director of the Honors Program, University of Maine at Augusta.* Personal Interview, May 30, 1995.

Six, Jack. *Chair, Faculty Assembly and Professor of Social Services, University of Maine at Augusta.* Personal Interview, May 30, 1995.

Woodbury, Robert L. *Interim Chancellor, University of Maine System.* Personal Interview, May 31, 1995.

Colorado Personal Communications

Albrecht, Robert. *Associate Vice President, University of Colorado.* Personal Interview, September 5, 1995.

Azama, Alma. *Coordinator of Distance Education and Teleconferencing, University of Northern Colorado.* Personal Interview, September 14, 1995.

Grieder, Timothy. *Director, Continuing Education and Extended Academic Programs, Colorado Commission on Higher Education.* Telephone Interview, October 18, 1995.

Halgren, Lee. *Vice President for Academic and Student Affairs, The State Colleges in Colorado.* Telephone Interview, November 21, 1995.

Hart, Sharon. *Deputy Executive Director, Colorado Commission on Higher Education.* Telephone Interview, October 20, 1995.

Hunter, Ken. *Faculty Chair, Social/Behavioral Sciences, Front Range Community College.* Personal Interview, September 15, 1995.

Larson, Toni. *Executive Director, Independent Higher Education of Colorado.* Personal Interview, September 18, 1995.

Maher, Thomas G. *Director, Office of Instructional Services, Colorado State University.* Personal Interview, September 15, 1995.

McGuinness, Aims C. *Chair of the Trustees of the State Colleges in Colorado.* Personal Interview, November 14, 1995.

Murray, Norm. *Engineer, State Division of Telecommunications.* Personal Interview, September 29, 1995.

Sulton, James. *Senior Academic Officer, Colorado Commission on Higher Education.* Telephone Interview, October 18, 1995.

Susman, Mary Beth. *Executive Director, Colorado Electronic Community College.* Personal Interview, September 5, 1995.

Tilson, Steve. *Director, Distance Learning, Front Range Community College.* Personal Interview, September 7, 1995.

Wartgow, Jerry. *President, Colorado Community College and Occupational Education System.* Personal Interview, September 12, 1995.

Williamson, Don. *Vice President for Information Technologies, Colorado Community College and Occupational Education System.* Personal Interview, September 6, 1995.